

# Notice of Allowability

Application No.

10/035,864

Examiner

Daniel Swerdlow

Applicant(s)

GOODINGS, CHRIS

Art Unit

2644

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed 2 March 2005.
2. ☒ The allowed claim(s) is/are 1-22.
3. ☒ The drawings filed on 26 December 2001 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All b) ☐ Some\* c) ☐ None of the:
    1. ☒ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
  - \* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

## Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_\_
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_.

### REASONS FOR ALLOWANCE

1. The following is an examiner's statement of reasons for allowance:
2. Regarding Claim 1, Oprea discloses controlling volume in a telephone ringer (column 1, lines 37-41) including: establishing a ringing frequency of 348 Hz and 445 Hz (i.e., generating a first signal in the audible frequency range) (column 3, lines 17-19); generating a train of inaudible 128 kHz pulses (i.e., a second signal with a higher frequency than the first signal) (column 3, lines 38-42) and a duty cycle (i.e., mark-space ratio) of 3/16 to 9/16 (i.e., less than 100%) (column 4, lines 55-58); combining (i.e., modulating) the ringing signal frequency (i.e., first signal) with the pulse train (i.e., second signal) in an AND gate (Fig. 1, reference 3; column 3, lines 25-32) to produce an output with the same 348 Hz and 445 Hz frequencies (i.e., similar timbre to the first signal); driving a speaker (i.e., applying the output signal to the audio transducer) (column 1, line 56); whereby the volume is controlled by modifying the pulse width of the pulses forming the pulse train (i.e., varies with the mark-space ratio of the second digital pulse train signal) (column 1, lines 49-51). However, Oprea uses a counter and gate arrangement to vary the duty cycle of the inaudible pulses. As such, the prior art fails to disclose or suggest the mark space ratio of the second signal being a multiple of a ratio of the first clock frequency to a second clock frequency that is higher than the first clock frequency. Therefore, Claim 1 is allowable.
3. Claims 2 through 4 are allowable due to dependence from Claim 1.
4. Claims 7, 8, 13 and 18 contain limitations similar to those of Claim 1 and are allowable for the same reasons.

Art Unit: 2644

5. Claims 9 through 12, 14 through 17 and 19 through 22 are allowable due to dependence from their respective base claims.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel Swerdlow whose telephone number is 571-272-7531. The examiner can normally be reached on Monday through Friday between 7:30 AM and 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sinh H. Tran can be reached on 571-272-7564. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ds

20 April 2005



SINH TRAN  
SUPERVISORY PATENT EXAMINER